IFW

USPTO
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

20 January 2009

Re: response to office action, application 10/566,482

Dear Sir,

In response to your office action dated 10/28/2008, we would like to submit as follows:

In item 16 of the office action the examiner rejects claims 1 and 10-13 as being unpatentable over Obremski et al in view of Duveneck et al.

We would like to bring examiner's attention to paragraph 0011 of the present specification that describes the prior art of the present invention. It recites a number of inventions where light excitation and detection are integrated with the binding sites. For instance, US Patent No 6,437,345 by Neuschafer et al (where the above Duveneck is listed as the second inventor) describes such integrated micro-assembly. This type of integration when individual elements are produced separately and micro assembled together is called *hybrid* integration (paragraph 0011 line 4-8 of the present specification). This is different from *monolithic* integration of the present invention where the whole monolithically integrated structure is produced by processing a single substrate. This type of integration has cost and performance advantages over hybrid integration of the prior art.

In item 16 (second paragraph on page 7 of the office action) the examiner suggests that Duveneck teaches monolithic integration. With due respect, this statement is factually incorrect. There is no mentioning of word *monolithic* by Duveneck when he teaches the possibility of integration (column 3 lines 66-67) thus implying the hybrid integration of the prior art of the present invention.

Furthermore, in the last paragraph of item 16 the examiner refers to column 4, lines 2-12 of Duveneck as allegedly teaching the benefits of monolithic integration. Again, this is factually incorrect. In column 4, lines 2-12 Duveneck essentially teaches away from monolithic integration by proposing a complimentary excitation and detection chip in addition to a sensor platform in order to achieve higher signal stability. This is different from the biochip of the present invention where the whole structure is contained within a single monolithically integrated chip.